

10/526326

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SEQUENCE LISTING

<110> Nakamura, Yusuke
Furukawa, Yoichi
Oncotherapy Science, Inc.
The University of Tokyo

<120> METHOD OF DIAGNOSING COLON AND GASTRIC
CANCERS

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<150> US 60/407,338

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Ile Leu Ile Leu Lys Glu Thr Arg Arg Leu Pro Trp Ala Thr Gly Tyr
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Ala Glu Val Ile Asn Ala Gly Lys Ser Thr His Asn Glu Asp Gln Ala
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Ser Cys Glu Val Leu Thr Val Lys Lys Lys Ala Gly Ala Val Thr Ser
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Val Ile Gly Ala Leu Glu Ser Ala Phe Lys Glu Met Asp Leu Gln Ile
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Ser Gln Asn Ile Gly Arg Gln Val Pro Ser Lys Val Ile Trp Asp His
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Leu Ser Thr Met Tyr Asp Met Gln Ala Leu His Glu Ser Glu Ile Leu
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Pro Phe Pro Asn Pro Glu Arg Asn Phe Val Leu Pro Glu Glu Ile Ile
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Glu Val Glu Leu Arg Glu Met Arg Thr Glu Ala Ile Ala Arg Pro Leu
165     170     175
Glu Ile Asn Glu Thr Glu Lys Val Met Arg Ile Ala Ile Lys Glu Ile
180     185     190
Leu Thr Gln Val Gln Lys Thr Lys Asp Leu Leu Asn Asn Val Ala Ser
195     200     205
Asp Glu Ala Asn Leu Glu Ala Lys Ile Glu Lys Arg Lys Leu Glu Leu
210     215     220
Glu Arg Asn Arg Lys Arg Leu Glu Thr Leu Gln Ser Val Arg Pro Cys
225     230     235     240
Phe Met Asp Glu Tyr Glu Lys Thr Glu Glu Glu Leu Gln Lys Gln Tyr
245     250     255
Asp Thr Tyr Leu Glu Lys Phe Gln Asn Leu Thr Tyr Leu Glu Gln Gln
260     265     270
Leu Glu Asp His His Arg Met Glu Gln Glu Arg Phe Glu Glu Ala Lys
275     280     285

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Asn	Thr	Leu	Cys	Leu	Ile	Gln	Asn	Lys	Leu	Lys	Glu	Glu	Glu	Lys	Arg
290						295					300				
Leu	Leu	Lys	Ser	Gly	Ser	Asn	Asp	Asp	Ser	Asp	Ile	Asp	Ile	Gln	Glu
305					310					315					320
Asp	Asp	Glu	Ser	Asp	Ser	Glu	Leu	Glu	Glu	Arg	Arg	Leu	Pro	Lys	Pro
				325					330					335	
Gln	Thr	Ala	Met	Glu	Met	Leu	Met	Gln	Gly	Arg	Pro	Gly	Lys	Arg	Ile
		340						345					350		
Val	Gly	Thr	Met	Gln	Gly	Gly	Asp	Ser	Asp	Asp	Asn	Glu	Asp	Ser	Glu
	355						360					365			
Glu	Ser	Glu	Ile	Asp	Met	Glu	Asp	Asp	Asp	Asp	Glu	Asp	Asp	Asp	Leu
	370					375					380				
Glu	Asp	Glu	Ser	Ile	Ser	Leu	Ser	Pro	Thr	Lys	Pro	Asn	Arg	Arg	Val
385					390					395					400
Arg	Lys	Ser	Glu	Pro	Leu	Asp	Glu	Ser	Asp	Asn	Asp	Phe			
				405					410						

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 <212> DNA
 <213> Homo sapiens

<400> 7
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 ctgagtgact gtaaattgca gaaccaactt gagaagcttg gattttcacc tggcccaata 180
 ctactggcct gaggcttcca ccactaaacg caaagctgta gataacctatt gcttggatta 240
 taagccttcc aagggaagaa ggtgggctgc aagagcacca agcaccagaa tcacatatgg 300
 gactatcacc aaagagagag actactgctg ggaagaccag actatcgaga gctggagaga 360
 agaaggtttc ccagtgggct tgaagcttgc tgtgcttggg attttcatca ttgtggtgtt 420
 tgtctacctg actgtggaaa ataagtcgct gtttggttaa gtaatttagg agcaaagcaa 480
 tgctccaagc gaggcctcct gcttcaggaa agaaccaaaa cactaccctg aagggccagc 540
 ctagcctgca gccctccctt gcagggagcc ttcccttgca ctgtgctgct ctcacagatc 600
 ggtgtctggg ctcagccagg tggaaggaac ctgcctaacc aggcacctgt gttaagagca 660
 tgatgggttag gaaatcccc aagtcatgtc aactctcatt aaaggtgctt ccatatttga 720
 gcaggcgtca aac 733

<210> 8
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 8
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<210> 9
 <211> 656
 <212> DNA
 <213> Homo sapiens

<400> 9
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 ctgagtgact gtaaattgca gaaccaactt gagaagcttg gattttcacc tggcccaata 180
 ctacgtgggc tgcaagagca ccaagcacca gaatcacata tgggactatc accaaagaga 240
 gagactactg cgcggaagac cagactatcg agagctggag agaagaaggt ttcccagtg 300

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gcttgaagct tgctgtgctt ggtattttca tcattgtggt gtttgtctac ctgactgtgg 360
aaaataagtc gctgttttggg taagtaattt aggagcaaag caatgctcca agcgaggcct 420
cctgcttcag gaaagaacca aaacactacc ctgaagggcc agcctagcct gcagccctcc 480
cttgcaaggga gccttcctt gcactgtgct gctctcacag atcgggtgtct gggctcagcc 540
aggtggaagg aacctgccta accaggcacc tgtgttaaga gcatgatggg taggaaatcc 600
cccaagtcac gtcaactctc attaaagggt cttccatatt tgagcaggcg tcaaac 656

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<210> 10
<211> 67
<212> PRT
<213> Homo sapiens

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<400> 10
Met Val Asp Val Lys Cys Leu Ser Asp Cys Lys Leu Gln Asn Gln Leu
 1           5           10          15
Glu Lys Leu Gly Phe Ser Pro Gly Pro Ile Leu Arg Gly Leu Gln Glu
      20           25           30
His Gln Ala Pro Glu Ser His Met Gly Leu Ser Pro Lys Arg Glu Thr
      35           40           45
Thr Ala Arg Lys Thr Arg Leu Ser Arg Ala Gly Glu Lys Lys Val Ser
      50           55           60
Gln Trp Ala
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<210> 11
<211> 3707
<212> DNA
<213> Homo sapiens

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cctcaggaaa tggagtccat ctccgcggcg ccggaggagg gcgagagaag gggtcgggtg 180
gcgcagttcc ttctggcacc agtcccggag gagtcgcgac cacggcggct gcaggagca 240
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aacagtttag ctcttcatct gaagaaggag atgaagattt tgaaggaaaa cagggaaaaa 420
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<210> 12
<211> 911
<212> PRT
<213> Homo sapiens

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20        25        30
Ala Gly Gly Gly Arg Glu Lys Gly Ser Val Gly Ala Val Pro Ser Gly
35        40        45
Thr Ser Pro Gly Gly Val Ala Thr Thr Ala Ala Ala Gly Ser Arg His
50        55        60
Ser Pro Ala Gly Ser Gln Ala Leu Gln Thr Thr Ala Ala Ser Glu Leu
65        70        75        80
Met Ser Gln Lys Lys Phe Glu Glu Ile Lys Lys Ala Asn Gln Ala Ala
85        90        95
Ala Arg Lys Leu Val Glu Glu Gln Phe Ser Ser Ser Ser Glu Glu Gly
100       105       110
Asp Glu Asp Phe Glu Gly Lys Gln Gly Lys Ile Leu Ala Asn Thr Phe
115       120       125
Ile Thr Tyr Thr Thr Gln Thr Asp Gly Asp Thr Arg Glu Leu Glu Arg
130       135       140
Thr Lys Gln Tyr Val Asn Glu Ala Phe Gln Ala Gly Ala Met Thr Cys
145       150       155       160
Leu Ile Cys Ile Ala Ser Val Lys Arg Asn Gln Ala Val Trp Ser Cys
165       170       175

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Ser	Gly	Cys	Phe	Cys	Ile	Phe	His	Met	Pro	Cys	Ile	Gln	Lys	Trp	Ala	
			180					185					190			
Lys	Asp	Ser	Gln	Phe	Leu	Val	Ser	Ser	Val	Thr	Asp	Asp	Asp	Phe	Gly	
		195					200					205				
Lys	Lys	Asp	Cys	Pro	Trp	Pro	Cys	Pro	Lys	Cys	Arg	Phe	Glu	Tyr	Lys	
	210					215					220					
Arg	Ser	Glu	Thr	Pro	Ser	Arg	Tyr	Tyr	Cys	Tyr	Cys	Gly	Lys	Val	Glu	
225					230					235					240	
Asp	Pro	Pro	Leu	Asp	Pro	Trp	Leu	Val	Pro	His	Ser	Cys	Gly	Gln	Val	
				245					250					255		
Cys	Glu	Arg	Glu	Phe	Lys	Pro	Pro	Cys	Gly	His	Lys	Cys	Leu	Leu	Leu	
			260					265					270			
Cys	His	Pro	Gly	Pro	Cys	Pro	Pro	Cys	Pro	Lys	Met	Val	Thr	Thr	Thr	
		275					280					285				
Cys	Tyr	Cys	Lys	Lys	Ala	Lys	Pro	Ile	Pro	Arg	Arg	Cys	Ser	Ala	Lys	
	290					295					300					
Glu	Trp	Ser	Cys	Gln	Leu	Pro	Cys	Gly	Gln	Lys	Leu	Leu	Cys	Gly	Gln	
305					310					315					320	
His	Lys	Cys	Glu	Asn	Pro	Cys	His	Ala	Gly	Ser	Cys	Gln	Pro	Cys	Pro	
				325					330					335		
Arg	Val	Ser	Arg	Gln	Lys	Cys	Val	Cys	Gly	Lys	Lys	Val	Ala	Glu	Arg	
			340					345					350			
Ser	Cys	Ala	Ser	Pro	Leu	Trp	His	Cys	Asp	Gln	Val	Cys	Gly	Lys	Thr	
		355					360					365				
Leu	Pro	Cys	Gly	Asn	His	Thr	Cys	Glu	Gln	Val	Cys	His	Val	Gly	Ala	
	370					375				380						
Cys	Gly	Glu	Cys	Pro	Arg	Ser	Gly	Lys	Arg	Phe	Cys	Pro	Cys	Gln	Lys	
385					390					395					400	
Ser	Lys	Phe	Ser	Leu	Pro	Cys	Thr	Glu	Asp	Val	Pro	Thr	Cys	Gly	Asp	
				405					410					415		
Ser	Cys	Asp	Lys	Val	Leu	Glu	Cys	Gly	Ile	His	Arg	Cys	Ser	Gln	Arg	
			420					425					430			
Cys	His	Arg	Gly	Pro	Cys	Glu	Thr	Cys	Arg	Gln	Glu	Val	Glu	Lys	His	
		435					440					445				
Cys	Arg	Cys	Gly	Lys	His	Thr	Lys	Arg	Met	Pro	Cys	His	Lys	Pro	Tyr	
	450					455					460					
Leu	Cys	Glu	Thr	Lys	Cys	Val	Lys	Met	Arg	Asp	Cys	Gln	Lys	His	Gln	
465					470					475					480	
Cys	Arg	Arg	Lys	Cys	Cys	Pro	Gly	Asn	Cys	Pro	Pro	Cys	Asp	Gln	Asn	
				485					490					495		
Cys	Gly	Arg	Thr	Leu	Gly	Cys	Arg	Asn	His	Lys	Cys	Pro	Ser	Val	Cys	
			500					505					510			
His	Arg	Gly	Ser	Cys	Tyr	Pro	Cys	Pro	Glu	Thr	Val	Asp	Val	Lys	Cys	
		515					520					525				
Asn	Cys	Gly	Asn	Thr	Lys	Val	Thr	Val	Pro	Cys	Gly	Arg	Glu	Arg	Thr	
	530					535					540					
Thr	Arg	Pro	Pro	Lys	Cys	Lys	Glu	Gln	Cys	Ser	Arg	Pro	Pro	Thr	Cys	
545					550					555					560	
His	His	Thr	Ser	Gln	Glu	Lys	His	Arg	Cys	His	Phe	Gly	Ser	Cys	Pro	
				565					570					575		
Pro	Cys	His	Gln	Pro	Cys	Gln	Lys	Val	Leu	Glu	Lys	Cys	Gly	His	Leu	
			580					585					590			
Cys	Pro	Ala	Pro	Cys	His	Asp	Gln	Ala	Leu	Ile	Lys	Gln	Thr	Gly	Arg	
		595					600					605				
His	Gln	Pro	Thr	Gly	Pro	Trp	Glu	Gln	Pro	Ser	Glu	Pro	Ala	Phe	Ile	
	610					615					620					
Gln	Thr	Ala	Leu	Pro	Cys	Pro	Pro	Cys	Gln	Val	Pro	Ile	Pro	Met	Glu	
625					630					635					640	
Cys	Leu	Gly	Lys	His	Glu	Val	Ser	Pro	Leu	Pro	Cys	His	Ala	Val	Gly	
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 <400> 15
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 <210> 16
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Artificially synthesized primer for RT-PCT

 <400> 16
 acaacacttg gtagcagcct t 21

 <210> 17
 <211> 24
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 <220>
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 <400> 17
 ctctaacaga cctcttaa at tgtg 24

 <210> 18
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 <400> 18
 catagaccca taagccctgt tg 22

 <210> 19
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 <400> 19
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 <210> 20
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 <400> 20
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<210> 21
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 <210> 22
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 <210> 23
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 <400> 23
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 <210> 24
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 <400> 24
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 <400> 25
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<210> 27
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<210> 28
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<400> 30
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<210> 32

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 <400> 32
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 <210> 33
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 <212> DNA
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 <400> 33
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 <210> 34
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 <400> 34
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 <210> 35
 <211> 25
 <212> DNA
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 <220>
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 <400> 35
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 <210> 36
 <211> 26
 <212> DNA
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 <220>
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 <400> 36
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 <210> 37
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<212> DNA
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 <400> 43
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 <210> 44
 <211> 30
 <212> DNA
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 <220>
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 <400> 44
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 <210> 45
 <211> 28
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Artificially synthesized primer for RT-PCT

 <400> 45
 tctctcgagt caggggccaa accgcagc 28

 <210> 46
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